

Claims

- [c1] A screen printing nozzle comprising:
 - a nozzle body;
 - a first layer on said nozzle body;
 - a second layer on said first layer, wherein said second layer includes a contact surface adapted to contact a stencil mask, and wherein said first layer has a lower durometer than said second layer; and
 - an opening through said nozzle body, said first layer, and said second layer, wherein said opening is adapted to allow material to flow through said screen printing nozzle to said stencil mask.
- [c2] The screen printing nozzle in claim 1, wherein said first layer is softer than said second layer.
- [c3] The screen printing nozzle in claim 1, wherein said second layer is more abrasion resistant than said first layer.
- [c4] The screen printing nozzle in claim 1, wherein said first layer provides additional flexibility to said second layer.
- [c5] The screen printing nozzle in claim 1, wherein said first layer and said second layer comprise an insert held within said body.

- [c6] The screen printing nozzle in claim 1, wherein said first layer is bonded to said body and said second layer is bonded to said first layer.
- [c7] The screen printing nozzle in claim 1, wherein said first layer and said second layer comprise one of: polyurethane, polymeric material, graphite filled plastics, and other engineered plastics.
- [c8] A screen printing nozzle comprising:
 - a nozzle body;
 - a first layer on said nozzle body;
 - a second layer on said first layer, wherein said second layer includes a contact surface adapted to contact a stencil mask, and wherein said first layer is softer than said second layer; and
 - an opening through said nozzle body, said first layer, and said second layer, wherein said opening is adapted to allow material to flow through said screen printing nozzle to said stencil mask.
- [c9] The screen printing nozzle in claim 8, wherein said first layer has a lower durometer than said second layer.
- [c10] The screen printing nozzle in claim 8, wherein said second layer is more durable than said first layer.

- [c11] The screen printing nozzle in claim 8, wherein said first layer provides additional flexibility to said second layer.
- [c12] The screen printing nozzle in claim 8, wherein said first layer and said second layer comprise an insert held within said body.
- [c13] The screen printing nozzle in claim 8, wherein said first layer is bonded to said body and said second layer is bonded to said first layer.
- [c14] The screen printing nozzle in claim 8, wherein said first layer and said second layer comprise one of: polyurethane, polymeric material, graphite filled plastics, and other engineered plastics.
- [c15] A screen printing nozzle comprising:
 - a nozzle body;
 - a first layer on said nozzle body;
 - a second layer on said first layer, wherein said second layer includes a contact surface adapted to contact a stencil mask, and wherein said second layer is harder and thinner than said first layer; and
 - an opening through said nozzle body, said first layer, and said second layer, wherein said opening is adapted to allow material to flow through said screen printing nozzle to said stencil mask.

- [c16] The screen printing nozzle in claim 15, wherein said first layer has a lower durometer than said second layer.
- [c17] The screen printing nozzle in claim 15, wherein said second layer is more durable than said first layer.
- [c18] The screen printing nozzle in claim 15, wherein said first layer provides additional flexibility to said second layer.
- [c19] The screen printing nozzle in claim 15, wherein said first layer and said second layer comprise an insert held within said body.
- [c20] The screen printing nozzle in claim 15, wherein said first layer is bonded to said body and said second layer is bonded to said first layer.